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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/662,731 | 09/15/2003 | Edward T. Tanner | 21323.000331 | 1688 |
| 7590 | 02/02/2005 | | EXAMINER | |
| J. Michael Martinez de Andino, Esq. HUNTON & WILLIAMS Riverfront Plaza, East Tower 951 East Byrd Street Richmond, VA 23219-4074 | | | RODRIGUEZ, PAMELA | |
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| | | | 3683 | |
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Please find below and/or attached an Office communication concerning this application or proceeding.

| | | | |
|------------------------------|-----------------|-------------------|--|
| Office Action Summary | Application No. | Applicant(s) | |
| | 10/662,731 | TANNER, EDWARD T. | |
| | Examiner | Art Unit | |
| | Pam Rodriguez | 3683 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on 24 November 2004.
 2a) This action is FINAL. 2b) This action is non-final.
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 1-35 is/are pending in the application.
 4a) Of the above claim(s) 7-10, 17-28 and 32-35 is/are withdrawn from consideration.
 5) Claim(s) _____ is/are allowed.
 6) Claim(s) 1-5, 11-15, 29 and 30 is/are rejected.
 7) Claim(s) 6, 16 and 31 is/are objected to.
 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.
 10) The drawing(s) filed on 15 September 2003 is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) Notice of References Cited (PTO-892)
 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
 Paper No(s)/Mail Date 09/15/03.

4) Interview Summary (PTO-413)
 Paper No(s)/Mail Date. _____.
 5) Notice of Informal Patent Application (PTO-152)
 6) Other: _____.

DETAILED ACTION

Election/Restrictions

1. Claims 36-41 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected group, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on November 24, 2004. And as such, these claims were canceled by applicant in his amendment filed November 24, 2004.
2. Applicant's election with traverse of Species B in the reply filed on November 24, 2004 is acknowledged. The traversal is on the ground(s) that Species C comprised of Figures 7A, 7B, 8, 9, and 10 should be grouped with Species B comprised of Figures 5 and 6 in that Figures 7A, 7B, 8, 9, and 10 are all just subspecies of Species B and thus should be examined together with the Species of Figure 5. This is not found persuasive because Figures 7A, 7B, 8, 9, and 10 depict various modifications or variants of the recharging assembly of Figure 5 and each of these Figures include structural different components. Figure 6 has been grouped with the Figure 5 species as this is the first embodiment disclosed as being a variation of Figure 5.

The requirement is still deemed proper and is therefore made FINAL.

3. Claims 7-10, 17-28, and 32-35 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected species, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in the reply filed on November 24, 2004.

Drawings

4. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: element "468" described on page 21 paragraph 0073 lines 6-7. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

5. The disclosure is objected to because of the following informalities: on page 1 line 2 of the specification, applicant should supply the U.S. patent number for the application referenced and on page 22 line 2 "spring 430" should read —spring 410—to be consistent with the previously used numerology referring to the springs of the damper systems.

Appropriate correction is required.

Claim Objections

6. Claim 1 is objected to because of the following informalities: in line 9 the second occurrence of the word "a" should be deleted. Appropriate correction is required.

Double Patenting

7. A rejection based on double patenting of the "same invention" type finds its support in the language of 35 U.S.C. 101 which states that "whoever invents or discovers any new and useful process ... may obtain a patent therefor ..." (Emphasis added). Thus, the term "same invention," in this context, means an invention drawn to identical subject matter. See *Miller v. Eagle Mfg. Co.*, 151 U.S. 186 (1894); *In re Ockert*, 245 F.2d 467, 114 USPQ 330 (CCPA 1957); and *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970).

A statutory type (35 U.S.C. 101) double patenting rejection can be overcome by canceling or amending the conflicting claims so they are no longer coextensive in scope. The filing of a terminal disclaimer cannot overcome a double patenting rejection based upon 35 U.S.C. 101.

8. Claims 1-3 and 6 are rejected under 35 U.S.C. 101 as claiming the same invention as that of claims 1-4 of prior U.S. Patent No. 6,752,250. This is a double patenting rejection.

Regarding Claims 1-3 and 6 of the instant application, these claims read almost word for word on Claims 1-4 of the patent with a few minor grammatical variations.

9. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double

patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

10. Claims 4, 11-14, 16, and 29-31 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-5 of U.S. Patent No. 6,752,250. Although the conflicting claims are not identical, they are not patentably distinct from each other because of the following reasons.

Regarding Claim 4 of the instant application, Claim 5 of the patent reads almost word for word on Claim 4 except for the current driver being operatively connected to the power supply as claimed in lines 3-4 of Claim 4 of the instant application.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have constructed the isolation system of the '250 patent to include a connection between the current driver and the power supply so that the current driver can always have adequate power to energize the damper to initiate damping as needed throughout the system.

Regarding Claims 11 and 29 of the instant application, Claim 1 of the patent reads almost word for word on Claims 11 and 29 except for the specifics of the damping control means controlling the reaction force applied to the load plate and the base plate by the semi-active damping means (Claim 11) and the rechargeable power supply being in communication/connected with the damping control means (Claims 11 and 29).

Regarding the damping control means, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have constructed the

isolation system of the '250 patent to ensure that the damping control means controlled the reaction force applied to the load plate and the base plate by the semi-active damping means as this type of control of the damping means is absolutely necessary in order for the isolation system to function properly. In other words, the damping control means has to control the semi-active damping means in order to isolate and control vibration between the load plate and the base plate.

Regarding the rechargeable power supply, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have constructed the isolation system of the '250 patent to have the rechargeable power supply be in communication with the damping control means in order to ensure that the damping control means always had adequate power to effect damping in the system. Without the necessary power to activate the damping control means, the entire isolation system would be inoperative.

Regarding Claims 12 and 30 of the instant application, this claim reads directly on Claims 2 and 3 of the '250 patent.

Regarding Claim 13 of the instant application, see Claim 4 of the '250 patent which contains its subject matter.

Regarding Claim 14 of the instant application, see Claim 5 of the '250 patent which contains its subject matter.

Regarding Claims 16 and 31 of the instant application, see Claim 1 of the '250 patent which contains its subject matter.

Claim Rejections - 35 USC § 102

11. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

12. Claims 1, 11, and 29 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 5,091,679 to Murty et al.

Regarding Claims 1, 11, and 29, Murty et al disclose a shock and vibration isolation system (see Figure 1) for mounting equipment to a base wall, the system comprising: a load plate 2 configured for attachment of the equipment thereto; a base plate 3 configured for attachment to the base wall; the base plate 3 being substantially parallel to the load plate 2, a spring arrangement 6 disposed intermediate the load plate 2 and the base plate 3, the spring arrangement 6 engaging the load plate and the base plate to bias the load plate and the base plate in a separated relationship (see Figure 1); a semi-active damper 7 disposed intermediate the load plate and the base plate, the a semi-active damper 7 being adapted for providing a selectively variable reaction force to the load plate and the base plate responsive to a relative displacement of the load plate with respect to the base plate; a damper controller 9 operatively connected to the semi-active damper 7 for controlling the reaction force applied to the load plate and the base plate, the damper controller including a rechargeable power supply 316; and a recharging arrangement in electrical communication with the rechargeable power supply, the recharging arrangement being mounted to one of the base plate and the

load plate and being adapted for converting vibratory motion to electrical energy for storage in the rechargeable power supply (see column 9 line 66 – column 10 line 50).

{See also the office action dated November 5, 2003 of the examiner of the parent application of this case which previously made this same rejection of the Claims}

Claim Rejections - 35 USC § 103

13. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

14. Claims 1-5, 11-15, 29, and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent no. 5,652,704 to Catanzarite in view of U.S. Patent no. 5,091,679 to Murty et al.

Regarding Claims 1, 11, and 29, Catanzarite discloses a shock and vibration isolation system for mounting equipment to a base wall (see Figure 1), the system comprising: a load plate 11 configured for attachment of the equipment thereto; a base plate 13 configured for attachment to the base wall; the base plate 13 being substantially parallel to the load plate 11 (see Figure 1), a spring arrangement 17 disposed intermediate the load plate and the base plate, the spring arrangement 17 engaging the load plate and the base plate to bias the load plate and the base plate in a separated relationship (see Figure 1); a semi-active damper 22 disposed intermediate the load plate and the base plate, the a semi-active damper 22 being adapted for

providing a selectively variable reaction force to the load plate and the base plate responsive to a relative displacement of the load plate with respect to the base plate; and a damper controller 42 operatively connected to the semi-active damper 22 for controlling the reaction force applied to the load plate and the base plate, the damper controller 42 including a rechargeable power supply 21.

However, Catanzarite does not disclose a recharging arrangement in electrical communication with the rechargeable power supply, the recharging arrangement being mounted to one of the base plate and the load plate and being adapted for converting vibratory motion to electrical energy for storage in the rechargeable power supply.

Murty et al are relied upon merely for their teachings of a vibration isolation system as discussed in paragraph 12 above including a recharging arrangement in electrical communication with the rechargeable power supply, the recharging arrangement being mounted to one of the base plate and the load plate and being adapted for converting vibratory motion to electrical energy for storage in the rechargeable power supply (see column 9 line 66 – column 10 line 50).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have provided the system of Catanzarite with a recharging arrangement for recharging the power supply as taught by Murty et al in order to allow for a smaller power supply than would otherwise be possible since the recharging method makes up for the “missing” capacity.

{See also the office action dated November 5, 2003 of the examiner of the parent application of this case which previously made this same rejection of the Claims}

Regarding Claims 2, 12, and 30, see column 2 lines 36-40 of Catanzarite.

Regarding Claims 3 and 13, see step S1 discussed in the Catanzarite reference wherein the rate (i.e., velocity of the damping system) is used to calculate the force output. See also steps S11 and S12 of Catanzarite where displacement is used to determine a force factor.

Regarding Claims 4 and 14, Catanzarite further discloses a current driver 35 operatively connected to the semi-active damper 22 and the power supply for selectively supplying current to energize the semi-active damper 22; a damper force control module in communication with the optimum force determination module and the current driver 35, the damper force control module being adapted for controlling the supply of current to the semi-active damper according to a predetermined control algorithm (see column 2 lines 53 et al and Figure 3 of the reference).

Regarding Claims 5 and 15, Catanzarite, as modified, does not disclose the specifics of the control algorithm claimed.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have constructed the control algorithm of Catanzarite, as modified, to be selected from the group consisting of clipped optimal control, velocity feedback control and acceleration bang-bang control dependent upon the operating environment of the isolation system. As long as the damper force control module is adapted to control the supply of current to the semi-active damper, the algorithm used to perform this function is arbitrary.

Allowable Subject Matter

15. Claims 6, 16, and 31 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims (as consistent with the examiner of the parent application's indication of such allowable subject matter in his office action issued November 5, 2003).

Conclusion

16. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Pam Rodriguez whose telephone number is 703-308-3657. The examiner can normally be reached on Mondays 5 am -3:30 pm and Tuesdays 5 am -11 am.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dave Bucci can be reached on 703-308-3668. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Pam Rodriguez
Primary Examiner
Art Unit 3683

Pr
01/31/05

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